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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,716	01/12/2004	Youn-Sun Kim	678-1337 (P11716)	2908
<div>7590 11/26/2007 Paul J. Farrell, Esq. DILWORTH & BARRESE, LLP 333 Earle Ovington Blvd. Uniondale, NY 11553</div>			<div>EXAMINER TEDOM, CLEMENT N</div>	
			<div>ART UNIT 2619</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 11/26/2007</div>	<div>DELIVERY MODE PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/756,716

Applicant(s)

KIM ET AL.

Examiner

Clement N. Tedom

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 15-18 is/are allowed.
- 6) ☐ Claim(s) 1-3, 5-14, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1-3,5-10,12, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al, PG PUB 20020141349, hereinafter (Kim), further in view of Gholmieh et al, PG PUB 2004/0147276, (hereinafter Gholmieh)

Regarding claims 1 and 7, Kim teaches a method of controlling reverse data rates in a mobile communication system including mobile stations (MSs) for transmitting reverse data and changing reverse data rates based on rate control bits (RCBs) received from a base station (BS), and the BS for controlling the reverse data rate of the MSs (See section [0066], as well as title), the method comprising the steps of:

generating dedicated RCBs indicating one of a rate increase and a rate decrease for individual MSs among the MSs and transmitting the dedicated RCBs to the individual MSs, respectively. (see section [0065], lines 9-20, as well as section [0112] to [0113], where RCB is dedicated to individual mobile station and contain information on adjusting the data rate).

Kim does not teach generating a global RCB.

Gholmieh which is in the same field of endeavor (reverse link data rate control), teaches the step of generating a global RCB indicating one of a rate increase and a rate decrease to all of the MSs within the BS and transmitting the global RCB to the MSs (see section [0005], where base station transmit control bit to MS, which inherently has to generate the control bit before transmitting it).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine a global with dedicated RCB in order to shorten time required to reach the full utilization of a reverse link in a mobile communication system supporting data transmission

Regarding claim 7, Kim teaches a determinator that generate RCB's (fig 3, item 34, as well as section [0046], lines 5-10) and a transmitter processor as part of a base station which in turn is a transmitter/receiver (fig 3, item 35, as well as section [0047], lines 1-5) suitable for performing the above limitation.

Regarding claims 2, 3, 8 and 10, Kim teaches RCBs are code-multiplexed prior to transmission. (See fig 4, items 46-48 and 44, as well as section [0063]) and time –

multiplexed (See section [0017], where HDR system used time slot, as well as section [0046], lines 10-13) .

Regarding claim 8 and 10, Kim teaches a determinator that generate RCB's (fig 3, item 34, as well as section [0046], lines 5-10) and a transmitter processor as part of a base station which in turn is a transmitter/receiver (fig 3, item 35, as well as section [0047], lines 1-5) suitable for performing the above limitation.

Regarding claim 5, Kim does not teach determining the global RCB according to a total capacity.

Gholmieh teaches the global RCB is determined according to a total capacity of the BS (see section [005], where link load/ capacity determine sending a CRC command)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine the RCB according to a total capacity of the BS for the same reason as mentioned in claim 4.

Regarding claim 6, Kim teaches dedicated RCB for each of the individual MSs is determined according to a data rate and an interference level of the MS. (See fig 6, step S60 and step S69, as well as section [0065], lines 4-6, and lines 17-20)

Regarding claim 9, Kim teaches transmitter (base station) includes a position controller for determining positions of the global RCB and the dedicated RCBs in time multiplexing. (See section [0063], where the determinator set the position of the RCB different slot).

Regarding claim 19, Kim teaches a method of controlling reverse data rates in a mobile.

Communication system including mobile stations (MSs) for transmitting reverse data and changing reverse data rates based on a dedicated rate control bits (RCBs) received from a base station (BS), and the BS for controlling the reverse data rate of the MSs (See title, as well as section [0065], lines 17-20).

Kim further teaches increasing a maximum reverse data rate if the dedicated RCB indicates a rate increase; and decreasing the maximum reverse data rate if the dedicated RCB indicates a rate decrease. (See section [0113], as well as section [0067], lines 1-4, also see abstract, last lines; where it is inherent that the maximum allowable adjustment is made).

Kim does not teach receiving a global RCB from the BS.

Gholmieh teaches the step of generating a global RCB indicating one of a rate increase and a rate decrease to all of the MSs within the BS and transmitting the global RCB to the MSs (see section [0005], where base station transmit control bit to MS, which inherently has to generate the control bit before transmitting it).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine a global with dedicated RCB in order to shorten time required to reach the full utilization of a reverse link in a mobile communication system supporting data transmission

Regarding claim 20, Kim teaches that the MS neglects the dedicated RCB if the dedicated RCB is not assigned for the MS. (See sections [0065], where each MS only consider the dedicated RCB assigned to it exclusively, and disregard the other).

Claims 11,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim ,in view of Gholmieh ,and further in view of Moon et al, Patent No 6671266, (hereinafter Moon).

Regarding claim 11, Kim does not teach that the transmitter comprises a power controller for setting the global RCB to a power enabling the global RCB to reach the MSs, and setting each of the dedicated RCBs to a power enabling the dedicated RCB to reach an individual MS corresponding to the dedicated RCB.

Moon, which is in the same field of endeavor (wireless communication system), teaches a transmitter (base station), which has a control power of the forward channel to adjust power to the level, required to reach the mobile station (See fig 6 as well as column 11, lines 36-49, where BS send message to MS at a specific power, if ACK message is not received, it increase the power)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust power to the level required to reach the mobile station to separately controlling the transmitting the power of channels in a CDMA communication system using orthogonal and quasi-orthogonal codes. (See column 2, lines 36-39).

Regarding claim 13, Kim further teaches a radio frequency transmitter (See fig 3, item A4) ,a gain controller for multiplying the global RCB by a gain to assign a power to the global RCB enabling the MSs to receive the global RCB (See fig 4, step 34-43, as well as section [0061]).

Kim does not teach a spreader for Walsh-spreading the gain-controlled global RCB and orthogonally scrambling the Walsh-spread global RCB;

Moon, which is in the same field of endeavor (wireless communication system),
Teaches a spreader for Walsh-spreading the gain-controlled global RCB and
orthogonally scrambling the Walsh-spread global RCB (See fig 1, as well as column 4,
lines 19-25).

It would have been obvious to one of ordinary skill in the art at the time the invention
was made to use a spreader for Walsh-spreading the gain-controlled global RCB and
orthogonally scrambling the Walsh-spread global RCB to separately controlling the
transmitting the power of channels in a CDMA communication system using orthogonal
and quasi-orthogonal codes. (See column 2, lines 36-39).

Regarding claim 14, Kim teaches that the global RCB transmitter further comprises a
repeater for repeating the global RCB a predetermined number of times and outputting
the repeated global RCBs to the gain controller (See fig 4, item 41, as well as section
[0056], lines 6-9).

Allowable Subject Matter

3. Claims 15 -18 are allowed. The prior art considered teach everything except for,
“maintaining the reverse rate if the global RCB and the dedicated RCB are different”.
Prior art does not also teach, “increasing/decreasing the maximum data rate if the
global and dedicated RCB indicated a rate increase/decrease.

Claim 16 and 18 are allowable because depending on allowable claims

Claim 4 is objected to as being dependent upon a rejected base claim, but would be
allowable if rewritten in independent form including all of the limitations of the base
claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement N. Tedom whose telephone number is (571)270-1827. The examiner can normally be reached on Monday-Friday, 7:30-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

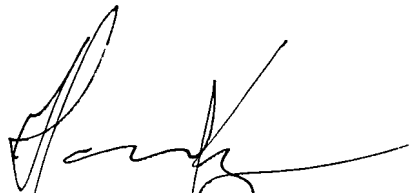
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Clement Tedom

Patent Examiner

11/16/07



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